

AIR SEALING AND INSULATION

Air sealing and insulating the "envelope" or "shell" of your home — its outer walls, ceiling, windows, doors, and floors — is often the most cost effective way to improve energy efficiency and comfort. ENERGY STAR estimates that a skilled contractor can save home owners up to 20% on heating and cooling costs (or up to 10% on their total annual energy bill) by sealing and insulating.

Air Sealing Leaks



Many air leaks and drafts are easy to find because they are easy to feel — like those around windows and doors. But holes hidden in attics, basements, and crawlspaces are usually bigger problems. Sealing these leaks with ZERODRAFT caulk, spray foam, or weather stripping will have a great impact on improving your comfort and reducing utility bills.

Homeowners are often concerned about sealing their house too tightly; however, this is very unlikely in most older homes. A certain amount of fresh air is needed for good indoor air quality and there are specifications that set the minimum amount of fresh air needed for a house. If you are concerned about how tight your home is, hire a contractor who can use diagnostic tools to measure your home's actual leakage. If your home is too tight, a fresh air ventilation system may be recommended.

After any home sealing project, have a heating and cooling technician check to make sure that your combustion appliances (gas- or oil-fired furnace, water heater, and dryer) are venting properly. For additional information on Indoor Air Quality (IAQ) issues related to homes, such as combustion safety, visit EPA's Indoor Air Quality Web site.

Adding Insulation



Insulation keeps your home warm in the winter and cool in the summer. There are several common types of insulation — fiberglass (in both batt and blown forms), cellulose, rigid foam board, and spray foam.

When correctly installed **with air sealing**, each type of insulation can deliver comfort and lower energy bills during the hottest and coldest times of the year. Energy Efficient Investments does not recommend blown or bat fiberglass due to health concerns in regards to air-born fiberglass.

Insulation performance is measured by R-value — its ability to resist heat flow. Higher R-values mean more insulating power. Different R-values are recommended for walls, attics, basements and crawlspaces, depending on your area of the country. Insulation works best when air is not moving through or around it. *So it is very important to seal air leaks before installing insulation to ensure that you get the best performance from the insulation.*

- Energy Efficient Investments recommends an R-49 to most of our customers and in some cases we will recommend R-60 depending on what is most cost-effective for your home.

To get the biggest savings, the easiest place to add insulation is usually in the attic. Attics offer the most cost effective opportunity for real energy savings.

Please give us a call!